



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,810	06/26/2003	Morito Morishima	P 0304520 H7953US	5462

7590 03/31/2008
Pillsbury Winthrop LLP
Intellectual Property Group
Suite 2800
725 South Figueroa Street
Los Angeles, CA 90017-5406

EXAMINER

PHAM, VAN T

ART UNIT	PAPER NUMBER
----------	--------------

2627

MAIL DATE	DELIVERY MODE
-----------	---------------

03/31/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/606,810	Applicant(s) MORISHIMA, MORITO	
	Examiner VAN T. PHAM	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 12, 14 and 16-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 12, 14, 16-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/03/2008 has been entered.

Response to Arguments

Applicant's arguments filed 03/03/2008 have been fully considered but they are not persuasive.

Applicant's argued that Okumura fails to teach or suggest "a movement distance set by the feeding section in accordance with the radial position of the optical pickup detected by the detecting section", which can be found in Okumura col. 1:

"a device for accessing an optical disc in and from which data is recorded or reproduced at least at a constant linear velocity comprising means for rotating the optical disc at a constant rotation velocity a head for accessing the optical disc for recording or reading out the data, head moving means for moving the head in the radial direction of the optical disc wherein, when the optical disc is driven by drive means, the head accesses the optical disc at a constant rotation velocity, and data processing means for changing a clock in accordance with the position of the head in the radial direction of the optical disc and processing data which is recorded in or reproduced from the optical disc in response to this clock, wherein the data which is accessed relatively to the optical disc by the head at a constant rotation velocity is recorded or reproduced substantially at a constant linear velocity."

"The read head 13 in FIG. 1 includes also a linear encoder 10 detecting the amount of displacement of the read head 3 in the radial direction of the disc after detecting the current position of the read head 3, accessing from the host system 15 is awaited (\$3). When accessing has been made by the host system 16 and a designated address has been given, the controller 5 calculates, responsive to the measured write speed information, an object address position and an amount of displacement from the current head position. When, for example, the write speed is known to be 1.4 m/sec, and the block corresponding to the designated address is a block of 32 minute, 43 second, 37 block, a position of .phi.90 mm is calculated as the position to which the read head should be displaced.

Note: Applicant had argued this limitation in the Remarks submitted on 04/23/2007 which found not persuasive.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 12, 14, and 16-25 and 28-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okumura et al. (US 5,444,687) in view of Kuwabara et al. (US 5,668,589).

Regarding claim 1, Okumura discloses an optical disc recording apparatus, comprising:

a rotating section which rotates the optical disc at a substantially constant speed (see Figs. 1, 4, abstract) (noted that Okumura also discloses an optical pickup which applies a laser beam of substantially constant power to an optical disc, see response above),

a feeding section which moves the optical pickup by a movement distance in a radial direction of the optical disc (see Figs. 1, 4, cols. 1-2, col. 4, line 65- col. 5, line 9);

a detecting section which detects a radial position of the optical pickup with respect to the optical disc (see col. 7, lines 18-29); and

a movement distance controlling section which changes the movement distance set by the feeding section in accordance with the radial position of the optical pickup detected by the detecting section (see Figs. 1, 4, cols. 1-2, col. 4, line 65- col. 5, line 9 and see response above).

Okumura disclose an optical pickup in which data is recorded or to be recorded at a constant linear velocity (noted that the Applicant admitted prior art discloses CLV (constant linear velocity) system in which recording is performed while controlling the power of a laser beam emitted from an optical pickup to an optical disc to be constant (see [0006])).

Kuwabara et al. discloses an optical disc recording apparatus for forming an image on an optical disc by a laser beam, comprising: an optical pickup which applies a laser beam of substantially constant power to the optical disc to form the image (see col. 2, lines 30-40, 43-54, and Fig. 7).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to provide an optical pickup, which applies a laser beam of substantially constant power to the optical disc to form the image in Okumura as suggested by Kuwabara, the

motivation being in order to record images of constant density without density irregularities (see Kuwabara col. 2, lines 51-52).

Regarding claim 2, the combination of Okumura and Kuwabara, see Okumura Fig. 1 and abstract, discloses the optical disc recording apparatus according to claim 1, wherein a rotation number of the optical disc rotated by the rotating section is controlled by a rotation controlling section: to be substantially constant (see Okumura col. 1).

Regarding claim 3, the combination of Okumura and Kuwabara, see Kuwabara col. 2 and see Okumura col. 1, discloses the optical disc recording apparatus according to claim 1, wherein the power of the laser beam is controlled by a laser power controlling section to be substantially constant.

Regarding claim 4, the combination of Okumura and Kuwabara, see Okumura Figs. 1, 4, discloses the optical disc recording apparatus according to claim 1, wherein the feeding section moves the optical pickup each time when the optical disc is rotated once by the rotating section.

Regarding claim 5, the combination of Okumura and Kuwabara, see Okumura Figs. 7-9, discloses the optical disc recording apparatus according to claim 1, wherein the movement distance controlling section changes the movement distance set by the feeding section, to be reduced in a stepwise manner as the radial position of the optical pickup is further moved from an inner peripheral side of the optical disc toward an outer peripheral side.

Regarding claim 6, the combination of Okumura and Kuwabara, see Okumura Figs. 1, element 12, col. 1, lines 53-68, discloses the optical disc recording apparatus according to claim 1, further including a storage section which stores feed management information for forming an image of a density which is uniform over a substantially whole area of the optical disc, the feed

management information including radial positions of the optical pickup and corresponding movement distances for the optical pickup, wherein the movement distance controlling section obtains the movement distance based on the radial position of the optical pickup that is detected by said detecting section, and a corresponding movement distance in the feed management information (see Kuwabara col. 2, discloses an optical disc recording apparatus records an image of a density which is uniform over a substantially whole area of the optical disc).

Regarding claim 7, see rejection above of claim 6 and see Okumura Fig. 1, Kuwabara col. 2, Fig. 3, for the optical disc recording apparatus forms an image on the optical disc in accordance with image data with using the optical pickup, the rotation section, the feeding section the detecting section and the movement distance controlling section.

Regarding claims 12, 14, 37-39, see rejection above of claim 1.

Regarding claims 16, 22, see rejection above of claim 2.

Regarding claim 17, 23, see rejection above of claim 3.

Regarding claim 18, 24, see rejection above of claim 4.

Regarding claim 19, 25, see rejection above of claim 5.

Regarding claims 20 and 26, see rejection above of claim 6.

Regarding claims 21 and 27, see rejection above of claim 7.

Regarding claim 28, the combination of Okumura and Maeda, discloses the optical disc of claim 1, wherein the movement distance of the optical pickup is the movement distance the laser beam in the disk radial direction (inherently, wherein the optical pickup head has a laser source on it, so when the head moves in the radial direction, the laser light source has to move too).

Regarding claims 29-30, see rejection above of claim 28.

Regarding claim 31, the combination of Okumura and Kuwabara, discloses the optical disc of claim 1, wherein the movement distance is set according to a line width of the optical disc (inherently, wherein the recording area of an optical disc is divided in several area in the radial direction, see Okumura col. 10).

Regarding claims 32-33, see rejection above of claim 31.

Regarding claims 34-36, the combination of Okumura and Kuwabara, discloses the optical disc recording apparatus according to claim 1 further including a memory for storing image data defining the image to be formed on the optical disc, wherein the detecting section detects a radial position of the optical pickup with respect to the optical disc and a circumferential position of the optical pickup with respect to the optical disc, and the image data corresponding to the detected radial position and the circumferential position is read out from the memory and transferred to the optical pickup to control on/off of the laser beam (see Okumura Fig. 6, buffer memory 52, and Kuwabara col. 2, Fig. 5).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kuwabara et al. US 5,668,589.

Honda et al. US 2002/0191517.

Maeda et al. US 5,768,245.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is (571)272-7590. The examiner can normally be reached on Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne R. Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VAN T PHAM/
Examiner, Art Unit 2627

/Wayne R. Young/
Supervisory Patent Examiner, Art Unit 2627